## 7-1 Financing Choices

## OBJECTIVES

- Explain short-term financing alternatives.
- Compare debt and equity financing.


## SHORT-TERM FINANCING ACTIVITIES

While companies hope to avoid borrowing, various types of debt are necessary for most businesses. To finance current business activities, a number of short-term borrowing sources are available.

## BUYING ON ACCOUNT

Companies often buy on credit. An organization's suppliers and vendors provide companies with needed items. Accounts payable refer to amounts owed to creditors for goods and services. These short-term, unsecured debts allow a company to finance daily business activities. Accounts payable are current liabilities generally due within 12 months from the transaction date, with most requiring payment in 30 to 90 days. This borrowing is considered unsecured since the loans are not backed by specific collateral.

## BANK LOANS AND NOTES

Most businesses borrow money at one time or another. Bank loans may be used for financing inventory, equipment, and other organizational needs. These installment loans are obtained from a commercial bank or other similar financial institution.

Bank installment loans are usually considered medium-term debt, since they are likely to be for more than a year but less than four years. The loan may be secured (with collateral) or unsecured (no collateral).

A line of credit is an agreement that allows a company to obtain additional loans without a new loan application. A preapproved limit is established. The business may then borrow additional amounts, often called advances, as long as the total does not exceed the established credit limit. A line of credit is especially useful when a company has irregular sales. These loans help the business cover its expenses in times of lower income.

Another common type of loan is a promissory note, which is a signed, written promise to borrow money between a borrower and a lender. The terms and conditions of the loan agreement are stated in the promissory note, including the amount of the loan, the interest rate, the payment schedule, late fees, and the financial institution where the loan is to be repaid.

## COMMERCIAL PAPER

Companies often need funds for short periods of time. Commercial paper refers to unsecured, short-term debt instruments issued by corporations. These loans have maturities ranging from 2 to 270 days.

## LONG-TERM FINANCING CHOICES

Companies face daily decisions about financing long-term business activities. Their choices are focused on debt, equity, and leasing.

## USING DEBT AND EQUITY

Should a company use bonds or stock for updating equipment or expanding its global activities? This question is an ongoing issue for business organizations.

Debt Financing. The use of accounts payable, loans, notes, and bonds are examples of debt financing. The use of long-term debt financing is common among companies and other types of organizations. The main benefits of debt include

- Use of someone else's money
- Expected return for investors is lower with debt than with equity
- Interest payments on debt reduce a company's taxes

In contrast to these advantages, the major drawback of debt - the risk of bankruptcy - must also be considered.
Equity Financing. Instead of debt, companies may seek additional investors for the company. A smaller company might offer partial ownership to investors, while a larger corporation might sell stock. Common positive aspects of equity include

- No increased bankruptcy risk; equity contributions are not required to be repaid
- Potential participation by additional owners
- Increased future potential for borrowing

The major negative aspect of equity is that the increased number of shares can result in reduced control by existing owners.

## LEASING

Instead of buying an item, companies may decide to rent. Leasing is a legal agreement to use property that belongs to another person. This type of contract may be used for real estate, equipment, or other assets. For a specified time of use, a lease payment, sometimes called rent, must be made to the owner of the property. The owner of the property is called the lessor, while the user who rents the item is the lessee. When a company is deciding whether to buy or lease, the following factors are considered.

- Are funds available to buy the item?
- What is the length of the useful life of the asset?
- How would the company's taxes be affected?
- What is the expected value of the asset after its useful life?


## 7-2 Debt Financing: Bonds

## OBJECTIVES

- Describe the main types of government and corporate bonds.
- Explain activities associated with issuing bonds.


## TYPES OF BONDS

To raise money for current operations or future expansion, most governments and corporations sell bonds. A bond is a certificate representing a promise to pay a definite amount of money at a stated interest rate on a specified maturity date (due date). Bonds are similar to promissory notes issued by individual borrowers. When you buy a bond, you are lending money to the organization issuing the bond. You become a creditor of the organization.

## GOVERNMENT BONDS

Borrowing is a major source of funds for most government agencies. Federal, state, and local governments issue a variety of bonds.
U.S. Savings Bonds. One of the safest investments for people with small amounts to invest is U.S. government savings bonds.

- Series EE Savings Bonds. Series EE bonds come in denominations from $\$ 50$ to $\$ 10,000$, pay interest through a process called discounting. A Series EE bond is bought at half its face value. A $\$ 50$ bond costs $\$ 25$ and, at the end of its full term, pays at least $\$ 50$. The difference between the purchase price and the redemption (payoff) value is the interest earned. The interest earned is determined by the length of time the bond is held. The time it takes for a savings bond to mature will vary depending on the current interest rate being paid.
- I-Bond. One other type of savings bond is the I-Bond. These investments pay an interest rate that is lower than the rate of other savings bonds, but they pay a variable rate that increases with inflation (hence the name " $I$-Bond").

Federal Government Bonds. The federal government also borrows. The U.S. Treasury issues three major types of debt securities. The difference among them is the length of time to maturity.

- Treasury Bills. T-Bills are short-term borrowing, with maturities from 91 days to one year.
- Treasury Notes. T-Notes have maturities from one to ten years.
- Treasury Bonds. T-Bonds are long-term borrowing, with maturities ranging from 10 to 30 years.

Debt securities are also issued by other federal agencies. These include the Federal National Mortgage Association (often called Fannie Mae), the Federal Housing Administration (FHA), the Government National Mortgage Association (Ginnie Mae), and the Federal Loan Mortgage Corporation (Freddie Mac). Bonds issued by these agencies pay a slightly higher interest rate than Treasury Department securities.

State and Local Government Bonds. States, cities, counties, school districts, and other taxing entities borrow to fund various projects. Bonds issued by local and state governments are called municipal bonds, or munis. Two types of municipal bonds exist:

- General Obligation Bond. A general obligation bond is backed by the full faith, credit, and taxing power of the government issuing the bond.
- Revenue Bond. A revenue bond is repaid with the income from the project that the bond was issued to finance, such as a toll bridge or stadium.

Municipal bonds have an advantage over bonds issued by companies. Often, interest earned on municipal bonds is exempt from federal and most state income taxes. A tax-exempt investment results in a higher return. Consider these two situations:

- Investment A, a corporate bond paying $\$ 100$ in interest that is taxable, results in the investor keeping less than $\$ 100$, since taxes must be paid on the interest earned.
- Investment B, a municipal bond paying $\$ 100$ in interest that is not taxed, resulting in a higher return since the investor keeps the entire $\$ 100$.

This higher rate of return, often referred to as the taxable equivalent yield, would be the comparable rate of return had the interest been subject to income taxes.

Foreign Government Bonds. To finance roads, schools, and military equipment for their nations, foreign governments also issue bonds. These debts are a direct obligation of a foreign government. Foreign governments may issue two types of bonds:

- External Bonds. These bonds are intended for investors in another country. Interest and principal are paid in the currency of the country in which investors live. External bonds of countries intended for purchase by investors in the U.S. are called dollar bonds.
- Internal Bonds. These bonds are aimed at investors in the country issuing the bond and are payable in the native currency. Foreign government bonds that are payable in several currencies are known as multiple currency bonds.

The value of foreign government bonds is based on the same factors as other bonds, including the economic and political stability of the government issuing the bonds. Investors in these bonds commonly face additional risk, such as varied exchange rates, currency instability, and changes in administrations.

## CORPORATE BONDS

Investing in bonds is quite different from investing in stock. When you invest in stock, you are an owner of the company. When you buy a bond, you are lending money to the company. Bonds issued by corporations are called corporate bonds.

Mortgage Bonds. One type of corporate bond is a mortgage bond. This type of debt is secured by a specific asset or property. The collateral for a mortgage bond may be equipment, a building, or land. For lenders, a mortgage bond is safer than other types of bonds since a pledge of an asset in the event of default reduces the risk.

Debenture Bonds. A corporate bond without collateral is a debenture bond. This is an unsecured debt bond whose holder has the claim of a general creditor on all assets of the issuer not pledged specifically to secure other debt.

Other Features of Corporate Bonds. A callable bond allows the company to payoff the debt before the maturity date at a specified price. A convertible bond can be exchanged for common stock in the same company. This conversion of a bond to stock will occur according to terms set forth in advance. The agreement will list the set number of shares that will be issued for each bond.

## GLOBAL COMPANY BONDS

Companies based in other countries also issue bonds. A corporation may issue debt securities in more than one region at a time. For example, a European company may issue bonds for sale in both its home region and in Japan. These bonds will most likely be issued both in the currency of the home country (euro) and the other country (yen). Global bonds are usually issued by businesses with an international reputation and high credit rating.

## ISSUING BONDS

Every bond has a face value, also called the maturity value or par value, that indicates the amount being borrowed. Most corporate bonds issued in the United States have a face value of $\$ 1,000$. Around the world, bonds may be issued with different face values. In the United Kingdom, bonds traditionally are issued for 100 pounds sterling. In Brazil, the standard amount is 1,000 reals, while in South Africa it is 100 rand. The maturity date is the date when the bond, which is a loan, must
be repaid. Corporate bonds in the U.S. may be issued for any time period, but they are most often issued for 5,10 , or 20 years.

## INVESTMENT BANKERS

An investment banker is an individual or company that assists companies with issuing new securities. When raising large amounts of capital, several investment banking companies may work together to sell the new bonds.

Advice to Company. One of the significant roles of the investment banker is to guide the company when it issues bonds. Investment bankers will evaluate the company's capital structure (use of debt and equity) to determine if issuing bonds is appropriate and will help to determine the amount of additional debt that might be sold.

Underwriting Process. Another task of the investment banker when issuing bonds is underwriting. Underwriting involves setting the price, selling the new bonds, and taking on the risk in this process. Underwriters make their income from the price difference, or spread, between the amount paid to the company issuing the bonds and what investors pay for the bonds. Potential buyers of newly issued bonds include banks, investment companies, pension funds, and individuals. Should the investment bankers not be able to find enough buyers, they hold some bonds themselves. Later, they hope to sell the securities to various investors.

## INTEREST RATES

Interest is paid periodically (usually twice a year) to bondholders based on the bond's face value and its stated interest rate. Then, on the bond's maturity date, the face value is repaid to the investor.

Coupon Rate. The coupon rate is the stated annual interest rate for a bond. The annual interest is based on the face value of the bond. The total interest for a year is usually made in two semiannual payments, every six months.

Example: An 8 percent, $\$ 1,000$ bond would have annual interest of $\$ 80$. This amount is paid to the holder of the bond each year until maturity.

The coupon rate is based on current market interest rates for bonds with comparable risk. This rate is determined during the underwriting process. The monetary policy of the Federal Reserve has a major effect on interest rates. When money is tight, interest rates tend to move upward. In contrast, an environment of loose money results in lower rates.

Current Yield. The actual rate of return for investors will often vary from the coupon rate. As interest rates change, the rate of return required by investors may increase or decrease. The current yield of a bond is the relationship between the amount of interest and the cost of the bond. As interest rates increase, bond values decline, so the current yield is higher.
Current Yield (\%) $=\frac{\text { Interest Amount }}{\text { Cost of Bond }}$

Example: $\quad$ Current Yield (\%) $=\$ 80 \div \$ 940=0.085=8.5$ percent
In this situation, the cost (market value) of the bond declined from \$1,000 to \$940 due to higher interest rates. This lower bond value, in relation to the fixed interest payment ( $\$ 80$ ), results in a higher yield for the investor.

Basis Points. Bond yield is also reported in terms of basis points, which divides 1 percent into hundreds. A basis point is $1 / 100$ of a percentage point. For example, 40 basis points is 0.4 percent. When a bond yield goes from 5.07 percent to 5.32 percent, this change will be reported as an increase of 25 basis points. If a rate changes 50 basis points, it represents a change of one half of 1 percent.

## BOND RATINGS

All companies do not pay the same coupon rates. Their coupon rates are affected by the current market level of interest rates and the financial stability of the company. A bond rating is a measure of the quality and safety of a company's debt. This evaluation is an indicator of how likely it is that a business will be able to make the interest and maturity value payments on the bonds it issues.

Bond ratings evaluate the possibility of default by a bond issuer. As shown in Figure 7-1, these ratings range from AAA (highly unlikely to default) to D (in default). Two commonly used bond rating companies are Standard \& Poor's and Moody's Investors Service.

FIGURE 7-1
Bond Ratings

| Quality | Moody's | S\&P | Description |
| :---: | :---: | :---: | :---: |
| High-grade | AAA <br> AA | AAA <br> AA | These ratings are assigned companies judged to be of high quality by all standards; almost no chance of default. |
| Mediumgrade | A BAA | A BBB | Bonds from companies that have many favorable factors with very little chance of default. |
| Speculative | $\begin{aligned} & \text { BA } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \text { BB } \\ & \text { B } \end{aligned}$ | Bonds judged to be somewhat uncertain and a fairly high risk. |
| Default | $\begin{aligned} & \text { CAA } \\ & \text { CA } \\ & \text { C } \end{aligned}$ | $\begin{aligned} & \text { CCC } \\ & \text { CC } \\ & \text { C } \\ & \text { D } \end{aligned}$ | Bonds from companies that are of poor standing with extremely poor prospects for making payments to investors; company may have filed for bankruptcy. |

Bond ratings are commonly affected by:

- The earning power of the company
- Other debts the company currently owes
- The past success and future potential of company management

Bond ratings affect the interest rate a company must offer on its bonds. Lower bond ratings require a high rate to attract investors to the higher risk bond.

## 7-3 Equity Financing: Stock

## OBJECTIVES

- Describe the types of capital stock sold by corporations.
- Explain the process for issuing stock.


## TYPES OF STOCK

To raise funds for current expansion, future growth, and other company goals, a company may wish to take on additional owners who will provide more equity. A company that sells stock for the first time or sells additional shares is using equity financing.

## COMMON STOCK

The most frequently used type of corporate ownership gives participants voting rights and an opportunity to share in profits. Common stock is an equity security representing ownership in a corporation with voting rights. Common stock has no stated dividend rate. As part owners of the corporation, common stockholders are invited to the annual meeting of the corporation. They are entitled to one vote per share of common stock owned.

When sharing in profits, stockholders receive a dividend, which is a portion of company profits. Common stockholders receive dividends only after preferred stockholders have been paid their dividends. If the profits of a company are large, the common stockholders may receive additional dividends. For example, suppose that a company has issued $\$ 100,000$ worth of common stock and $\$ 100,000$ worth of preferred stock with a stated dividend rate of 6 percent. If the company earns a profit of $\$ 20,000$ and pays all the profit out as dividends, preferred stockholders would be paid $\$ 6,000$ in dividends ( $\$ 100,000 \times 0.06$ ). The remainder, or $\$ 14,000(\$ 20,000-\$ 6,000)$, would be available to pay dividends to the common stockholders. The common stockholders would earn a return of 14 percent.

Investors who purchase common stock in a corporation:

- Have voting rights to elect the company's board of directors at the annual stockholders' meeting
- Are not guaranteed dividends, but may receive higher dividends during the company's prosperous periods
- Are paid after bondholders, other creditors, and preferred stockholders if a company fails or liquidates


## PREFERRED STOCK

Preferred stock is the second main class of stock issued by corporations. This security has priority over common stock in the payment of dividends. A preferred stockholder, for example, is paid first if profits are used for any dividends.

The dividends paid to preferred stockholders are usually stated as a dollar amount or as a percentage of the par value. The par value of a stock is the minimum price for which a share can be issued. A company sets the par value when the corporation is created. The par value usually has no relationship to the market value of a stock.

Preferred stock has characteristics of both debt and equity. Investors receive a set dividend, similar to bond interest payments, but preferred stock represents ownership.

For investors. owning preferred stock is less risky than common stock. If liquidation would occur, preferred shareholders are paid before common stockholders. Preferred stockholders generally have no voting rights within the corporation.

Two other characteristics of preferred stock sometimes exist. Cumulative preferred stock requires that missed (unpaid) dividends due to low earnings will build up until paid to preferred stockholders. Convertible preferred stock allows an exchange into common shares. The conversion process is similar to that of convertible bonds.

## ISSUING STOCK

When a corporation decides to issue stock for the first time or to issue additional shares of stock, various actions are required.

## INITIAL PUBLIC OFFERING

When a company offers stock to outside investors for the first time, it is termed an initial public offering (IPO). Public offering may refer to the issuing of additional shares of stock by a company. The IPO for a company is also called "going public." The organization goes from being a privately held corporation to one that is publicly held. After this process, its shares are sold on a stock exchange. As shown in Figure 7-2, four steps are involved when issuing stock.

1. Consult With Investment Banker. The process starts with contacting an investment banking company. These firms provide advice about issuing stock and will assist with legal approval from the Securities and Exchange Commission (SEC). Investment bankers will develop a marketing and advertising plan to promote the stock issue. They will also obtain potential customers. Finally, investment bankers act as agents to distribute very large blocks of stocks and bonds.
2. Obtain Needed Approvals. This step involves two groups. First, a majority of current owners of the company must agree to "go public." Then, the SEC must approve the process. This federal agency assures that the stock offering is legitimate. The public must be protected from any deceptive practices or potential investment fraud.
3. Notify The Public Of The Issue. Full disclosure of the upcoming stock issue is another requirement. Through news releases and ads in financial publications, the
 the shares that will be available. A prospectus is prepared and distributed. This document presents the legal and financial information about the company issuing the stock.
4. Set Price Through Underwriting Process. The underwriters in the investment banking company evaluate various company and market factors to develop a price range for the stock. Then, an issue price (also called the subscription price) is set. Some questions the investment banking company might consider in setting the price include:

- Has the company been profitable over a period of years?
- Have the company's managers made good business decisions?
- Does the company have growth potential in coming years?
- Does the company have an unusually large amount of debt?
- How does the company compare with others in its industry?

The IPO process is often called the primary market, where newly issued securities are sold by investment bankers. After the initial selling, all later buying and selling of those securities occurs in the secondary market. A secondary market is the location where securities are traded after they are initially offered in the primary market. The majority of security transactions occur in the secondary market. The New York Stock Exchange, other stock exchanges, the NASDAQ, and bond markets are examples of secondary markets.

## FOCUS ON: Investment Fraud

Each year, investors lose more than \$1.2 billion to various scams. Especially vulnerable are elderly consumers, who may not completely understand the opportunities they are offered. And, after being scammed, older consumers may be too embarrassed to report their losses to government authorities. Some of the most common tactics used to attract people to deceptive investment schemes include:

- Developing trust, in which con artists create a friendly connection by talking about their family and asking about yours.
- Offering an impossibly attractive investment opportunity, for example, land that is cheap compared to other real estate or guaranteed returns of over 50 percent.
- Establishing credibility. The scam artist might imply that the investment is safe because it is advertised in The Wall Street Journal or mention that the company is "licensed" with the state.
- Creating social pressure by implying that many other people have made this investment. They may even mention names of people the investor knows.
- Generating fear to close the deal, since "you wouldn't want to miss this opportunity."
- Implying limited availability, such as "these are the last two rare coins available."

To avoid becoming a victim of investment fraud, use these guidelines:

1. Investigate before signing and paying any money. Contact federal and state agencies about any complaints against the company. Also, talk with family members and friends about the investment.
2. Avoid "you must sign up today" opportunities. Take your time to determine if the investment is legitimate and appropriate for your situation.
3. Research the company and type of investment. Understand the costs and potential risks.
4. Most important, remember that deals that seem "too good to be true" .. . usually are!

## 7-4 Stock and Bond Markets

## OBJECTIVES

- Identify the activities involved with stock market transactions.
- Explain the purpose of a mutual fund.
- Describe the factors that affect bond values.


## STOCK MARKET TRANSACTIONS

Each day, hundreds of millions of shares of stock are bought and sold in the secondary market. These shares were previously issued by companies in the primary market, and now they are bought and sold among various investors.

## TYPES OF STOCKBROKERS

A stockbroker is a licensed specialist in the buying and selling of stocks and bonds. Brokers serve as an intermediary between the issuer of securities (bonds and stock) and potential customers (investors). Through brokers, stockholders state the price at which they are willing to sell their shares. Interested buyers tell brokers what they would be willing to pay for those shares. The brokers then work out a price that is acceptable to both buyers and sellers. For their services, brokers charge a fee called a commission. Two types of brokers are common:

- Full-Service Broker. A full-service broker provides information about securities you may want to buy. Full-service brokers work for brokerage houses with large research staffs.
- Discount Broker. In contrast, a discount broker places orders and offers limited research and other services. Discount brokers charge lower commissions than full-service brokers. Investors who do their own research can save money by using a discount broker.

Today, both full-service and discount brokers can be reached online handling trades through their web sites.

## STOCK EXCHANGES

Brokers work through stock exchanges, which are businesses where securities are bought and sold. The best known stock exchange is the New York Stock Exchange in New York City. The American Stock Exchange is also in New York City. Regional stock exchanges operate in Boston, Chicago, Philadelphia, and San Francisco. More than 150 stock exchanges are in operation around the world.

In the past, stocks of smaller companies were not traded on a stock exchange. The over-the-counter (OTC) market is a network where securities transactions occur using telephones and computers rather than on the floor of an exchange. The OTC market in the U.S. is the NASDAQ, which stands for the National Association of Securities Dealers Automated Quotations. Today, the NASDAQ includes many large companies.

## CHANGING STOCK VALUES

The market value of a stock is the price at which a share of stock can be bought and sold in the stock market. This current value of a share can change rapidly. If the business is doing well, the market value is likely to go up. If the business has a poor record, the market value usually goes down. The market value may be affected by current economic conditions as well as national and global politics. The prices at which stocks are being bought and sold are available through stock market listings in newspapers and online.

Stock Market Indexes. Another measurement of investment values is a stock index. These indicators of stock values are commonly reported on television, radio, and in newspapers. The Dow Jones Industrial Average (DJA) includes 30 of the largest U.S. companies. Another commonly reported stock index is the Standard \& Poor's (S\&P) 500, which is based on stock values of 500 major companies.

Stock Split. When the value of a share of stock gets fairly high, many companies decide to lower the price to increase market activity. A stock split is the proportional division of a number of stock shares into a larger number. With this action, a lower share value occurs, but there is no change in the proportion of each stockholder's ownership. For example, with a 2 -for- 1 stock split, the number of shares you own doubles, but the total market value is unchanged. Instead of one share of stock valued at $\$ 100$, you would have two shares valued at $\$ 50$ each. This increase in the number of shares does not change the company's total market value or each shareholder's share of ownership. If you own 20,000 shares, representing 5 percent of the company, you would now have 40,000 shares which would still represent 5 percent ownership. The company hopes that the lower share price resulting from a stock split will create increased interest and market demand for the stock. A stock split can result in strong gains if the price increases to the previous level, since each investor now has more shares.

Selling Short. If an investor believes the price of a stock will fall, a method exists to make money. Selling short involves selling a stock not actually owned when a lower price is expected. Then, the investor must buy the stock back at the market price to replace the "borrowed" shares. For example, an investor may decide to "sell short" 1,000 shares of a company's stock on April 20 for $\$ 10$ a share. Then, on May 1 , if the stock is selling at $\$ 9$ a share, the investor can "replace" the borrowed shares at a lower price. By selling short, this investor made a profit of $\$ 1,000$, less commission and any other fees. In this process, investors who sell short hope to buy the needed replacement shares at a lower price. This activity can be quite risky. If the stock increases in value, a loss will occur when the replacement shares must be bought at a higher price.

## STOCK SELECTION ACTIONS

As a person decides which stocks to purchase, an investment analysis process can be helpful.
Investment Analysis Process. Buying stocks can consist of a process with the following steps.

1. Observe and analyze economic and social trends.
2. Determine industries that will be affected.
3. Identify companies in those industries.
4. Decide whether to buy, sell, or hold the stock of those companies.

By observing various economic and social trends in the U.S. and around the world, you can determine what types of companies could benefit from those trends.

Economic Factors. Various economic conditions can affect stock prices, including the following factors.

- Inflation. Higher prices can result in lower spending by consumers, reducing company profits
- Interest Rates. As the cost of money changes, company profits can increase or decline
- Consumer Spending. Profits of companies that sell products and services to households are directly affected by consumer buying habits
- Employment. As people obtain or lose jobs, the amount of money they have for spending will affect company profits

Industry Trends. Societal changes and other factors can have a positive or negative influence on various types of companies. For example, as people live longer, increased health care is required. Companies involved in health care products may be a wise investment. Other industries that investors might analyze and consider for stock purchases include automotive, construction, consumer products, financial services, retailing, technology, and utilities.

Market Trends. The overall direction of stock market prices is also a factor to consider. A bull market refers to a period of rising stock values. During this time, investors tend to have a positive attitude about the stock market and the economy. In contrast, a bear market is a period of declining stock market prices, in which investor attitudes are generally negative.

Dividend Yield. Additional information about a company may also be considered. The yield of a stock is an important factor if your goal is to earn a good return from your investment.

$$
\text { Dividend Yield (\%) = } \begin{gathered}
\text { Dividend Per Share } \\
\text { Market Price Per Share }
\end{gathered}
$$

Example: $\quad$ Suppose that a company is paying a quarterly dividend of $\$ 0.60$ a share. The total dividend for the year would be $\$ 2.40$, and if the stock is selling for $\$ 40$ a share, the current yield (return) would be calculated as follows:

$$
\$ 2.40 \div \$ 40=0.06 \text { or } 6 \text { percent }
$$

Price-Earnings Ratio. The price of a stock should also be considered. Many investors look at the stock's price-earnings (P/E) ratio, which is the relationship between a stock's selling price and its earnings per share. The $P / E$ gives you an indication of whether the stock is priced high or low in relation to its earnings per share.

Stock Information Sources. When selecting stocks, learn something about the company. Several information sources are available, such as Moody's Handbook of Common Stocks, Value Line, and Standard \& Poor's Encyclopedia of Stocks. These publications provide data about net worth, debt, sales revenue, profits, dividend history, and the future prospects of companies. Many web sites are also available to provide valuable information on companies.

The U.S. Securities and Exchange Commission, which oversees the financial markets, requires all companies that issue publicly traded securities to file detailed reports electronically. Those reports can be accessed online through their EDGAR system.

## MUTUAL FUNDS

Instead of buying individual bonds and stock, many people buy shares in an investment company. A mutual fund is an investment fund set up and managed by companies that receive money from many investors. Then, the company buys and sells a wide variety of stocks or bonds. Mutual funds allow investors to spread their risk among many investments.

## TYPES OF MUTUAL FUNDS

Over 17,000 different mutual funds are available to investors. These funds have many different objectives. For instance, some emphasize investing in growth stocks, some emphasize stocks that pay high dividends, and some emphasize international stocks. Some of the main types of mutual funds include:

- Aggressive growth stock funds, which seek quick growth but also have higher risk
- Income funds that specialize in stocks that pay regular dividends
- International funds that invest in stock of companies from around the world
- Sector funds, which include stocks of companies in the same industry, such as health care, energy, or telecommunications
- Bond funds, which specialize in corporate bonds
- Balanced funds that invest in both stock and bonds

When selecting a mutual fund in which to invest, investors should match their personal investment goals to the type of mutual fund.

## MUTUAL FUND VALUES

Mutual fund investors own shares of the mutual fund. The value of each share is based on the total value of all investments made by the mutual fund company.

Example: If the investments were worth $\$ 400,000$ and 80,000 shares existed, each share would be worth $\$ 5$.

$$
\$ 400,000 \div 80,000=\$ 5
$$

This amount is called the net asset value (NAV) of a mutual fund. A part of the dividends and interest received from the fund's investments is used to pay operating expenses of the fund. The major portion of earnings is distributed to the mutual fund shareholders or reinvested in the fund.

## CHANGING BOND VALUES

Bonds are bought and sold in the bond market. The market value of a bond varies based on changing interest rates and the credit rating of the borrowing organization.

## REPORTING BOND PRICES

Bond values are reported, like stocks, in daily newspapers and online. Corporate bond prices are stated in 100s, with the bonds sold in $\$ 1,000$ denominations (ten times the reported amount).

For example, a bond reported at 100 is selling at its face value of $\$ 1000$. A bond selling at 105 has a current market value of $\$ 1,050$. At 100, the bond is being sold at par. At 105, it is being sold at a premium. Below 100, the bond is being sold at a discount. The price investors are willing to pay for a bond depends upon the stated interest rate. If interest rates on similar bonds are higher than the bond's stated rate, investors will want to buy the bond for less than its face value. On the other hand, if the bond's stated interest rate is higher than interest rates on similar bonds, the seller of the bond will want to receive more than its face value.

As shown in Figure 7-3, changing interest rates affect the price of the bond. Since the interest payment is set when the bond is issued, the current yield will be affected by the amount a person pays for the bond.

| Changing Bond Values and the Current Yield |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Situation | Bond Sold at | Market Value | Reported at | Interest Payment | Current Yield |
| Bond issued | par | \$1,000 | 100 | \$100 | $\begin{aligned} & 10 \% \\ & \$ 100 \div \$ 1,000 \end{aligned}$ |
| Higher interest rates | discount | \$ 900 | 90 | \$100 | $\begin{aligned} & 11.1 \% \\ & \$ 100 \div \$ 900 \end{aligned}$ |
| Lower interest rates | premium | \$1,100 | 110 | \$100 | $\begin{aligned} & 9.1 \% \\ & \$ 100 \div \$ 1,100 \end{aligned}$ |

## CAPITAL GAINS

When a person holds a bond until maturity, a capital gain may occur. A capital gain is the increase in the value between the purchase price and the maturity value. When a bond is bought at a discount such as $\$ 900$ and held until maturity, the investor has a $\$ 100$ capital gain, in addition to the interest payments on the bond.

A capital loss can also result. If a bond is bought at a premium, such as $\$ 1,100$, at maturity the bondholder only receives $\$ 1,000$. Why would a person do this? The investor has paid for the right to receive the annual interest payments on the bond until the maturity date.

The current yield is the rate of return based on interest earned. Capital gains and losses affect the yield to maturity (YTM) of a bond. The yield to maturity is the annual rate of return an investor would receive when a bond is held until maturity. YTM takes into account the price discount below or the premium above the face value of the bond.

As you might expect, the YTM is more than the current yield when the bond is selling at a discount. This rate is less than the current yield when the bond is selling at a premium.

## FOCUS ON: Stock Exchanges around the World

Locations of stock exchanges range from Johannesburg to Hong Kong and from Madrid to Lima. More than 150 exist in countries around the world. Each of these organizations serves local companies with trading facilities for buying and selling stocks, bonds, and other securities. The Prague Stock Exchange started in 1993, the year Czechoslovakia divided into two separate countries-the Czech Republic and Slovakia. As the countries moved from a centrally planned economy under communist rule to a free-market economy, citizens were allowed to invest in stocks. As the capita I of the Czech Republic, Prague is the center of the country's business activities. When it started, the Prague Stock Exchange handled transactions for only seven companies. Today, $t$ his exchange has expanded its business to include many more companies. Many of the previously government-controlled businesses are now privately owned. Some of the most popular stocks are companies in the hotel and glass manufacturing industries. While many local stock exchanges exist, the influence of regional markets is expanding. Euronext was formed in 2000 through a merger of the Paris, Brussels, and Amsterdam stock exchanges. This organization regularly trades stocks of more than 1,250 companies. More recently, Euronext has been acquired by the New York Stock Exchange.

## Chapter Summary

- The main short-term financing methods used by businesses include buying on account (accounts payable), bank loan, line of credit, promissory note, and commercial paper.
- Debt (borrowing), equity (selling stock), and leasing (renting) are methods used by organizations to finance business activities.
- Bonds are issued by the federal government, state and local governments, foreign governments, and companies.
- The process for issuing bonds involves the use of an investment banker, who provides advice to the company and helps set the price of the bonds. Rates on new bonds will be affected by current interest rates and the bond rating of the company.
- The two main types of stock issued by corporations are common and preferred.
- An initial public offering (IPO) is the process of offering stock to outside investors for the first time. When this occurs, a company that was privately owned becomes a public company.
- A stockbroker is a licensed specialist in the buying and selling of stocks and bonds. Brokers work through stock exchanges, which are businesses that accommodate the buying and selling of securities. The main factors that affect stock prices are economic conditions, industry trends, and market trends.
- A mutual fund is an investment fund set up and managed by companies that receive money from many investors. The money from investors is used to buy and sell a wide variety of stocks or bonds. Mutual funds allow investors to spread their risk among many investments. Many different types of mutual funds exist to meet different investment objectives.
- Bond prices are affected by interest rates. Higher rates will result in a bond being sold at a discount. When rates decline, bonds are sold at a premium. A capital gain is the increase in value between the purchase price and the maturity value on a bond or other investment.

